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(54) Title: COMPLETE BIOSYNTHETIC GENE SET FOR SYNTHESIS OF POLYKETIDE ANTIBIOTICS, INCLUDING THE ALBICIDIN FAMILY, RESISTANCE GENES AND USES THEREOF

(57) Abstract: Three gene clusters that together encode albicidin biosynthesis, the complete gene DNA sequences, and the deduced protein sequences for the enzymes and methods for using the DNA sequences are disclosed and discussed as well as methods for plant protection and creating new antibiotics. The novel Albicidin family of antibiotics is disclosed and their structure deduced.